

117TH CONGRESS  
2D SESSION

# H. R. 8337

To require the Secretary of Energy to carry out a carbon sequestration research initiative, and for other purposes.

---

## IN THE HOUSE OF REPRESENTATIVES

JULY 12, 2022

Mr. LUCAS (for himself, Mr. THOMPSON of Pennsylvania, and Mr. WESTERMAN) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Energy and Commerce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

## A BILL

To require the Secretary of Energy to carry out a carbon sequestration research initiative, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Carbon Sequestration  
5       Collaboration Act”.

6       **SEC. 2. CARBON SEQUESTRATION RESEARCH INITIATIVE.**

7       (a) IN GENERAL.—The Secretary of Energy, in co-  
8       ordination with the Secretary of the Interior and the Sec-

1     Secretary of Agriculture, shall establish an initiative to evaluate  
2     terrestrial carbon sequestration and carbon sequestration in geologic formations to—

4                 (1) enhance the scientific understanding of, and  
5     reduce uncertainties associated with, the long- and short-term behavior and potential environmental effects of sequestered carbon;

8                 (2) inform improved risk-assessment methods, risk-management practices, and standards with respect to the sequestration of carbon on large and small scales; and

12                 (3) provide reference data needed for the development and demonstration of new carbon sequestration technologies.

15     (b) INITIATIVE COMPONENTS.—In carrying out the initiative under subsection (a), the Secretary of Energy, in coordination with the Secretary of the Interior and the Secretary of Agriculture, shall—

19                 (1) identify scientific challenges for widespread adoption of terrestrial carbon sequestration and carbon sequestration in geological formations, including in shallow formations and sites not used for enhanced oil recovery;

24                 (2) develop, in coordination with relevant Federal agencies' research efforts, a long-term strategic

1 and prioritized research agenda to address such sci-  
2 entific challenges; and

3 (3) leverage for the advancement of modeling  
4 and analysis the collective body of knowledge and  
5 data, including experience and resources from exist-  
6 ing carbon utilization and sequestration research,  
7 entities, and demonstrations, from—

8 (A) the United States Geological Survey,  
9 the Agricultural Research Service, and the na-  
10 tional Carbon Utilization Research Center;

11 (B) the Department of Energy, including  
12 the Office of Science; and

13 (C) other Federal agencies, research com-  
14 munities, and users of the reference data re-  
15 ferred to in subsection (a)(3), including the Na-  
16 tional Institute of Food and Agriculture, the  
17 National Science Foundation, the Forest Serv-  
18 ice, and the Natural Resources Conservation  
19 Service.

20 (c) PRIORITIES.—In carrying out the initiative under  
21 subsection (a), the Secretary of Energy shall prioritize  
22 joint research with relevant Federal agencies, including  
23 the agencies specified in subsection (b)(3)(C), to achieve  
24 the following objectives:

1                             (1) Increasing the understanding and development  
2                             of permanent terrestrial carbon sequestration,  
3                             including through organic soil carbon sequestration,  
4                             soil carbon mineralization, artificial reforestation,  
5                             and carbon mineralization utilizing mine tailings.

6                             (2) Developing computational tools and data  
7                             sharing practices to assess and manage potential environmental  
8                             impacts at geologic formations and terrestrial carbon storage sites across a variety of eco-  
9                             systems.

11                             (3) Collecting, identifying, and utilizing data  
12                             needed to increase the understanding of terrestrial  
13                             carbon sequestration, in particular carbon sequestered through agricultural practices and conservation  
14                             agriculture, such as rangeland and grazing management, soil cover, and crop rotations.

17                             (4) Advancing the commercialization of new  
18                             and existing sequestration technologies or methods.

19                             (d) COORDINATION.—The Secretary of Energy shall  
20                             carry out the initiative under subsection (a) with and avoid  
21                             unnecessary duplication of the following:

22                             (1) Other research entities of the Department  
23                             of Energy, including the National Laboratories and  
24                             the Advanced Research Projects Agency—Energy.

1                         (2) Research entities, services, and partnerships  
2                         of the Department of Agriculture, including the Ag-  
3                         ricultural Research Service, the Natural Resources  
4                         Conservation Service, and the Forest Service.

5                         (3) Research entities of the Department of the  
6                         Interior.

7                         (e) RESEARCH PLAN.—Not later than two years after  
8                         the date of the enactment of this Act and annually there-  
9                         after, the Secretary of Energy shall submit to the Com-  
10                         mittee on Science, Space, and Technology, the Committee  
11                         on Natural Resources, and the Committee on Agriculture  
12                         of the House of Representatives and the Committee on  
13                         Energy and Natural Resources and the Committee on Ag-  
14                         riculture, Nutrition, and Forestry of the Senate the long-  
15                         term strategic and prioritized research agenda required  
16                         pursuant to subsection (b)(2).

17                         (f) DEFINITIONS.—In this section:

18                         (1) TERRESTRIAL CARBON SEQUESTRATION.—  
19                         The term “terrestrial carbon sequestration” means  
20                         carbon sequestration methods or technologies engi-  
21                         neered by humans and targeted at rangelands, agri-  
22                         cultural lands, or fallow lands to increase soil or-  
23                         ganic carbon levels or sequester carbon through  
24                         plant and root biomass, including through soil addi-  
25                         tives, geochemical approaches, and other engineered

1       solutions that can increase the storage of produced  
2       carbon in inorganic or mineral forms, such as  
3       biochar and carbon mineralization utilizing mine  
4       tailings.

5                 (2) CARBON SEQUESTRATION IN GEOLOGIC  
6       FORMATIONS.—The term “carbon sequestration in  
7       geologic formations” means carbon sequestration  
8       methods or technologies utilizing existing permeable  
9       or porous formations in geologic basins.

